

DESCRIPTION AMENDMENTS

Rewrite the paragraph beginning on page 1, line 3, to read as follows:

BACKGROUND OF THE INVENTION

The present invention relates to an arrangement in a fuel injection apparatus ~~as described in the preamble of claim 1.~~

Rewrite the paragraph beginning on page 2, line 4, to read as follows:

~~The aims of the invention can be achieved by the methods mainly disclosed in claim 1 and more closely disclosed in the dependent claims.~~

Rewrite the paragraph beginning on page 2, line 7, to read as follows:

SUMMARY OF THE INVENTION

According to the invention, an arrangement in the fuel injection system for controlling the fuel injection comprises a body part with a space arranged therein, through which space the fuel to be injected flows during operation, the space further having an inlet and an outlet opening therein. The arrangement further comprises a piston means, arranged movably in the space and having a channel or the like for creating a flow connection between the fuel inlet and the fuel outlet openings. In this arrangement the piston means can divide the space into the first part, being in connection with the inlet opening, and the second part, being in connection with the outlet opening. The arrangement further comprises a spring or the like for creating a force acting on the piston means in a direction opposite to the main direction of fuel flow. The main characterizing feature of the arrangement is that as the piston means is in the end adjacent the inlet opening or near it, the piston means and the body part delimit at least one third part of the space, the volume of which is dependent on the mutual positions of the piston means and the body part.

Rewrite the paragraph beginning on page 3, line 25, to read as follows:

BRIEF DESCRIPTION OF THE DRAWINGS

In the following the invention is described by way of example and with reference to the appended schematic drawings, of which

- figure 1 shows the arrangement according to the invention being applied to the fuel injection system of an engine;
- figure 2 shows an embodiment of the arrangement according to the invention;
- figure 3 is section A-A of figure 2.
- figure 4 shows the arrangement of figure 2 in a first extreme situation;
- figure 5 shows the arrangement of figure 2 in an intermediate situation;
- figure 6 shows the arrangement of figure 2 in another intermediate situation;
- figure 7 shows the arrangement of figure 2 in another extreme situation, and
- figures 8 - 10 show various embodiments of the arrangement of figure 2.

Rewrite the paragraph beginning on page 4, line 9, to read as follows:

DETAILED DESCRIPTION

Figure 1 shows very schematically, how the arrangement 4 according to the invention can be arranged in connection with a common rail fuel injection system of an internal combustion engine. Such a fuel injection system is known as such, and it is described here only as far as is essential for understanding the operation of the invention. The fuel injection system based on a common rail comprises as its main components the common rail, i.e. pressure accumulator 1, in which fuel is stored in high pressure to be injected into the engine and with which the injection valve 2 is in flow connection. A fuel channel system 3, 3' has been arranged between the common rail 1 to injection valve 2 metering the fuel to each cylinder (not shown). During operation, a sufficient pressure is maintained in the common rail achieving sufficient injection pressure for the injection valve 2. Each injection valve 2 comprises control means (not shown) for independently controlling the injection. Arrangement 4, the operation of which is described with reference to figures 2-8, has been provided in the fuel channel system 3, 3'.